AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE K	PAGE 1 OF 38

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0002	July 30, 2003	SP0600-03-1181	

6. ISSUED BY CODE	SP0600	7. ADMINISTERED BY (*If other than Item 6*) CODE	
DEFENSE ENERGY SUPPORT CENTER 8725 JOHN J. KINGMAN ROAD, SUITE 4950 FT. BELVOIR, VA 22060-6222 FAX (703) 767-2382 BUYER/SYMBOL: KIMBERLY BINNS/DESC-EB PHONE (703) 767-8422 P.P. 8.2			

8. NAME AND ADDRESS OF CONTRACTOR (*NO., street,city,county,State,and ZIP Code*)		9a. AMENDMENT OF SOLICITATION NO.
	X	SP0600-03-R-0070
		9b. DATED *(SEE ITEM 11)* 18 April 2003
		10a. MODIFICATION OF ONTRACT/ORDER NO.
		10b. DATED *(SEE ITEM 13)*

11. **THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers
[**X**] **is extended to September 17, 2003, at 3:00PM EST** [ ] is not extended

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning __1__ copies of the amendment;(b) By acknowledging receipt of this amendment on each copy of the offer submitted; or(c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. **ACCOUNTING AND APPROPRIATION DATA** *(If required)*

13. **THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. I2.05 CHANGES-FIXED PRICE (AUG 87)
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 43.01
	OTHER *(Specify type of modification and authority)*

E. **IMPORTANT:** Contractor [ ] is not, [x] is required to sign this document and return ____1__ copies to the issuing office.

14. **DESCRIPTION OF AMENDMENT/MODIFICATION** *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

See the following pages

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (*Type or print*)		16A. NAME OF CONTRACTING OFFICER	
		TERRI A. WORKMAN	
15B. NAME OF CONTRACTOR/OFFEROR BY _____ *(Signature of person authorized to sign)*	15C.DATE SIGNED	16B. UNITED STATES OF AMERICA BY *(Signature of Contracting Officer)*	16C.DATE SIGNED

A. The purpose of this amendment is to incorporate the following changes into Sections J, Areal Attachments, and to extend the closing date to **September 17, 2003** at 3:00PM EST in the subject solicitation:

1. Changes in Section J1, Electrical Distribution:

Add: J1.2 Electric Distribution System Description

J1.2.1 Electric Distribution System Fixed Equipment Inventory

Specifically excluded from the electric distribution system privatization are:

- Certain areas in the MFH are not included in this infrastructure project. The electric distribution systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the electric distribution system privatization. However, until the MFH privatization contractor can complete the isolation of the electric system from the main base system, these areas will temporarily remain the responsibility of this contractor.

Add: J1.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the KAFB boundaries. All areas identified as DOE or SNL are not included in the service area. All other areas are owned and operated by Air Force except for the following:

Kirtland AFB will be privatizing 1,784 homes in the New Pershing, East Sandia Loop and Capehart East Housing Areas under the Military Housing Privatization Initiative. The privatization contractor will be responsible for design and construction of facilities to provide Electricity to the respective housing areas. The existing electrical system for the housing areas has been excluded from this document with the exception of electrical lines passing through the areas that will continue to feed Air Force facilities.

Add: J1.11 Government Recognized System Deficiencies

TABLE 8
System Deficiencies
Electric Distribution System Kirtland AFB

Project Location	Project Description
Replace Power Lines at Starfire Optical Range	Poles are 30-years old in this area. They span a 45-degree slope that is on bedrock and impossible to reach with current equipment. When winds blow, the phases contact each other and cause outages. These outages will extend into the new MILCON TAC lab when constructed. Removing these poles and placing the conductors on aboveground cable trays will eliminate these problems.

TABLE 8
System Deficiencies
Electric Distribution System Kirtland AFB

Project Location	Project Description
Rebuild Feeder 1	Replaces power poles, adds vibration dampers, and converts crossarm structure to vertical structure for 1 of 4 distribution feeders.
Rebuild Feeder 2	Replaces power poles, adds vibration dampers, and converts crossarm structure to vertical structure for 1 of 4 distribution feeders.
Electrical Power Main Switching Station	A secure, adequate, reliable, maintainable, and redundant power system is required for effective mission completion. This project provides for a redundant power source for KAFB near the Carlisle Gate. Switchgear and related facilities will be housed within a new protective facility located within the base boundary in order to prevent sabotage.

2. Changes in Section J2, Natural Gas Distribution:

Add: J2.2 Natural Gas Distribution System Description

J2.2.1 Natural Gas Distribution System Fixed Equipment Inventory

Specifically excluded from the natural gas distribution system privatization are:

- Certain areas in the MFH are not included in this infrastructure project. The natural gas distribution systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the natural gas distribution system privatization. However, until the MFH privatization contractor can complete the isolation of the natural gas distribution system from the main base system, this area will temporarily remain the responsibility of this contractor.

Add: J2.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the KAFB boundaries. All areas identified as DOE or SNL are not included in the service area. All other areas are owned and operated by Air Force except for the following:

Kirtland AFB will be privatizing 1,784 homes in the New Pershing, East Sandia Loop and Capehart East Housing Areas under the Military Housing Privatization Initiative. The privatization contractor will be responsible for design and construction of facilities to provide gas to the respective housing areas. The existing natural gas system for the housing areas has been excluded from this document with the exception of gas lines passing through the areas that will continue to feed Air Force facilities.

3. Changes to Section J3, Water Distribution System:

Add: J3.2 Water Distribution System Description

J3.2.1 Water Distribution System Fixed Equipment Inventory

Specifically excluded from the water distribution system privatization are:

- Military Family Housing (MFH) utilities are not included in this project. The water systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the water distribution system privatization. There will be water lines going through the area involved in this contract since they connect Air Force facilities on one side of the area to facilities on the other side of the area. However, until the MFH privatization contractor can complete the isolation of the water distribution system from the main base system, these areas will temporarily remain the responsibility of this contractor.

Add: J3.11 Government Recognized System Deficiencies

TABLE 8
System Deficiencies
Water Distribution System Kirtland AFB

Project Location	Project Description
Backflow Preventer Installation at Fire Suppression Tanks	Provide backflow preventers at Facilities 760 and 1021 in order to isolate the fire suppression tanks at these locations from the potable water distribution system.

Add: J3.7 Water Conservation Projects

IAW Paragraph C.3, Utility Service Requirement, the following projects have been implemented by the Government for conservation purposes.

Non-potable water from Well #7 will continue to be used for non-potable application (irrigation) conforming to an Air Force approved remediation process. Blending and other techniques will not be used to introduce non-potable water into the drinking water distribution system without approval from 377ABW/EM. Operation and maintenance of any element of the water distribution system will not interfere with on-going Air Force remediation action. The Air Force will be responsible for sampling and testing at any remediation sites.

4. Changes to Section J4, Wastewater System:

Add: J4.2 Wastewater System Description

J4.2.1 Wastewater System Fixed Equipment Inventory

Specifically excluded from the wastewater system privatization are:

- Certain areas in the MFH are not included in this infrastructure project. The wastewater collection systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the wastewater collection system privatization. However, until the MFH privatization contractor can complete the isolation of the wastewater system from the main base system, these areas will temporarily remain the responsibility of this contractor.

Add: J4.2.1.1 Description

Monitoring Stations/Sampling Points

There are a total of six (6) sampling points in the KAFB Wastewater Collection system included in the sale. Four (4) of these points are currently owned and operated by KAFB. The first one is located at Hickam and Randolph Streets, the second one is located at Aberdeen and Truman Streets, the third is located at the ART Facility (Bldg. 715), and the fourth one is located at Connor Avenue and Louisiana Street in the Zia Park Housing Area.

Two of the monitoring stations belong to DOE/SNL and are to be transferred to the Contractor as part of this sale. The first one is located at Pennyslvania Street and Glow Road. The other one is located approximately 800 feet southeast of Munition Haul Road and Target Road B.

Add: J4.2.1.2 Inventory

Table 1

Fixed Inventory
Wastewater Collection System, Kirtland AFB

Item	Size (in.)	Quantity	Unit	Approximate Year of Construction
Monitoring Station				
		6	EA	1989

Add: J4.11 Government Recognized System Deficiencies

TABLE 6
System Deficiencies
Wastewater System Kirtland AFB

Project Location	Project Description
Replace sanitary sewer at 15th Street at O-Club	***Project replaces deteriorated sewers along 15th Street and behind the visiting officer's quarters and Officer's Club. Replacement eliminates periodic plugging of sewer lines and reduces manpower needed for maintenance.***

5. Add Areal Description for Electrical Distribution:

KIRTLAND AFB NM
AREAL EXTENT DESCRIPTION
PRIMARY ELECTRICAL DISTRIBUTION
April 2003

Public Service Company of New Mexico (PNM) provides power through four main overhead feeder transmission lines. Power is distributed throughout the base from 20 different, base-owned, substations. The substations contain metering equipment, switches, breakers, cables and bus work. The transmission lines provide power to the substation at 46 kilovolts (kV) that is then transformed to 12,470 volts and 4,160 volts for base wide distribution. Base ownership begins when the feeder lines leave the Sandia Station.

Excluded: Specifically excluded from the privatization are:

- Airfield lighting, wind socks, and all lighting circuitry from the transformers
- Taxiway Lighting and obstruction lighting and constant current regulators
- Parking Lot Lights and pedestrian sidewalk lighting
- Traffic Signals, electrical wiring and sensor and computer controls including
- Street Lighting from the transformers
- School Lighting
- Other Caution Lights
- Emergency Generation unless it is permanently attached to the systems
- Base Christmas tree
- Lightning Protection Poles located in Zia Park DOEs 115 kV transmission system and approximately 75 percent of the transmission feeders 1 and 2, which is also owned by the DOE. (Need to define the 25% not to DOE.)

Certain areas in the MFH are not included in this infrastructure project. The electric distribution systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the electric distribution system privatization. However, until the MFH privatization contractor can complete the isolation of the electric system from the main base system, these areas will temporarily remain the responsibility of this contractor.

All DOE-owned areas on the base. However, all utilities pass through DOE area's for which right of way documents from DOE will have to be negotiated per area. Some areas are secure and access is not allowed.

The intent of this areal description is to give a general flow pattern of the primary electric distribution system. Every line on every street may not be mentioned. This description is based on drawings provided by the base civil engineer office. Title of the drawing set is "Department of the Air Force, Air Force Materiel Command, Comprehensive Plan, Kirtland AFB Albuquerque NM, Primary Electric Distribution System. Basic date is January 31, 2003. Tab reference is G-4. There are 18 sheets in the set. Most of the electric distribution system may be found on sheets 3, 4 and 5. Sheets 12 and 15 have no electric lines. The areal description is intended to stand-alone but due to the multiple references to substations, poles, streets and buildings access to the drawings or the AutoCAD file will facilitate in following the general distribution pattern.

The PNM substation is also known as the Sandia Substation. It is located on the east perimeter near the Eubanks Gate. (Sheet 5). The high voltage feeder line is shown in cyan on the drawings. The line is an overhead line exiting the Sandia substation on the north side and going west. It turns north near the DOE substation 41 and back west southwest of the Eubanks Gate. The line turns north and crosses "G" Avenue going north inside the east perimeter fence.

At a pole near the east end of "D" Avenue the high voltage line turns west to go along the north side of "D" Avenue. A high voltage line continues north. It turns west near the east end of "A" Avenue and goes west to substation number three located at the northeast corner of the intersection of East "A" Avenue and 15th Street.

Going back to the high voltage line at "D" Avenue and 15th Street, the line makes a north turn at the northwest corner of the intersection of "D" and 4th Street. It turns west on "B" Avenue and goes along the north side of the street to the Child Care Center, building 20160, where it turns south and back west beyond the parking lot for the Base Exchange. The line on Gibson Blvd turns south at the southeast corner of the exchange parking lot and goes along the east side of Pennsylvania Street. The line turns southeast at a point north of building 1791 and goes along the fence line in parallel with sub feeders 1 and 2. The high voltage line turns south at Louisiana Blvd. North of substation ten the line goes west and south. The south line turns east at the southwest corner of the housing area just east of Randolph Avenue and goes east to the southeast corner of the housing area where an underground line goes north and south. The overhead line goes southeast and off sheet 5 after crossing Texas Avenue. (This will continue on sheet 6.)

Going back to substation ten, the overhead high voltage line going west is north of Randolph Avenue in parallel with subs 10 feeder 1. The line goes off sheet 5 south of the athletic fields. (This will continue on sheet 3.)

At the east side of sheet 5 near the end of "D" Avenue, the overhead high voltage line goes west in parallel with sub 10 feeder 1 along the north side of sheet 5. The high voltage line branches north at a pole at the southeast corner of the intersection of "D" Avenue and 15th Street. The line goes north along the east side of 15th Street. It crosses to the west side of the street and turns east into substation number three located at the intersection of 15th Street and East "A" Avenue completing a high voltage loop around the northeast quadrant of the base covered by sheet 5.

Going back to the Sandia Substation on the east perimeter, a high voltage line exits the south side of the substation and goes east as an overhead line. It turns south at a point south of the DOE Substation 41. It goes off sheet 5 in the southeast corner of the sheet. (This will be continued on sheet 6.) (Notice there is a pair of high voltage lines entering the southeast corner on sheet 5. Also a PNM line going south to the DOE. It is assumed the pair of lines is base owned. There is no sheet east of sheet 5.) This completes the description of high voltage lines on sheet 5.

High voltage lines from substation number three at East "A" Avenue and 15th Street exit on the west and south side of the substation. The line to the west turns northwest to East Sandia Circle and makes a complete loop around the circle

The line to the south of the substation number three goes south along the east side of 15th Street in parallel with the high voltage line going to the substation.

Power distribution to buildings north of substation number three is provided by a branch line off East Sandia Circle east of building 8650. The line goes north to building 813 then east to 15th Street and south on the west side of the street. A line goes north then east to supply buildings on 22nd Drive.

Two underground lines in the 2200 area provide power service to Club building 22000. Another underground line in the northeast quadrant of sheet 5 begins at building 8801 near the Sandia Elementary School playground. It goes southeast and south to join the overhead line on "D" Avenue at 15th Street. This completes the description of power distribution in the northeast area covered by sheet 5. This area is bounded by Wyoming Blvd on the west and "D" Avenue on the south. Power distribution in the southeast quadrant of sheet 5 is primarily in the DOE area of the base and is not included in privatization.

The Commissary and Base Exchange are located north of Gibson Blvd. The facilities receive primary electric power from underground lines. The BX line is an extension of the line on "D" Avenue. The Commissary line is from the line on Gibson Blvd. Buildings south of Gibson Blvd and east of Pennsylvania Street receive primary electric power from underground lines going north south on Pennsylvania Street and Texas Street. The north south line on 2nd Street comes from 4th Street. East west branches supply power to buildings in the area. The north south line on Wyoming Blvd is an overhead line from substation number 1 located at the intersection of "H" Avenue and Wyoming Blvd. The line goes south past the museum and leaves sheet 5 going to sheet 6. Another north south line in this area is on 5th Street along the west side of Hardin Field.

Buildings east of Wyoming Blvd and east of 9th Street are supplied power by an underground line from Wyoming Blvd at "K" Avenue. This line goes east on "K" Avenue and turns south at the DOE boundary. It leaves sheet 5 and goes to sheet 6. Buildings west of

Wyoming Blvd and east of Texas Street are supplied power from an underground line off Texas Street at building 20414. This line goes south on 3rd Street.

In the southwest corner of sheet 5 the Air National Guard area is supplied power from two overhead lines coming south off Randolph Street. An east west line on Guard Road connects the two north south lines. Underground lines extend the overhead lines through the Air National Guard area. Two of these lines leave sheet 5 to sheet 6.

Primary power distribution on sheet 3 enters the east side of the area as an underground line in the north side of Randolph Avenue. This line is in parallel with sub feeder1. The line branches north and south at the intersection of Randolph Avenue and San Mateo Blvd. The north extent of the line is along the east side of San Mateo Blvd. A north branch at Aberdeen Avenue goes to the sentry house at the Truman Gate. The south reach of this line is along the east side of San Mateo Blvd. The line goes onto sheet 4 south of building 1037 as a low voltage line.

The overhead high voltage line on Randolph Avenue ends at building 975 near the intersection with Doris Street. The high voltage line is shown in cyan and the sub feeder 1 is shown in red. An underground line goes north south on the east side of Doris Street connecting the lines on Randolph and Aberdeen Avenue. Lines are in parallel on Aberdeen Avenue. Sub feeder 1 turns north at Charlene Street to supply primary power to the housing area north of Aberdeen Avenue and south of Gibson Blvd. The high voltage line continues west past Charlene Street and turns southwest at MacDill Street and back west at the service station on Aberdeen Avenue. This line joins a north south line on the west side of Carlisle Blvd. The line goes north to Gibson Blvd and south to substation number 25 at Kirtland Drive and Lowery Avenue.

Going back to the east side feeder at Randolph Avenue and San Mateo Blvd, the south branch of sub feeder 1 goes along the east side of San Mateo Blvd and to sheet 4 south of building 1037. There is an east west branch off San Mateo Blvd at building 1028. The line goes east then southeast and ends at a point west of building 1033 near the rail sidings. A north south branch supplies Fire Station number 2. Another east west branch off the San Mateo line is south of building 1037 and east to building 113.

The area bounded by Doris Street on the west, Aberdeen Avenue on the north, San Mateo Blvd on the east and Randolph Avenue on the south is supplied by underground lines except for a small overhead portion on the east side of Doris Street. Underground primary lines are shown as a dotted cyan line on the drawings.

From substation number 1 near the intersection of Doris Street and Randolph Avenue there are two underground lines going north then east in parallel. One line continues north to building 949 and turns west across Doris Street and back north to cross Aberdeen Avenue. It ends at building 595 at the intersection of Charlene and Aberdeen. Going back to substation 1, the two underground lines go east then north and part at Biggs Avenue. One ends at building 947. The other continues east across Eileen, Francis, Truman, and San Mateo Blvd. It turns south on San Mateo and goes across Randolph Avenue and turns west across San Mateo Blvd to building 1015 on Hercules Way where it turns north and returns to substation number 1 completing a loop around the area. North south distribution in this area is from a handhold at the intersection of Truman Street and Biggs Avenue. This line extends northeast to building 914 and northwest to building 942.

The area south of Randolph Avenue and along Hercules Way on the flight line receives primary power via underground lines. The lines go south to buildings 1000, 1001, and 1002 on Hangar Road. Underground lines also supply power to the DOE buildings 481 and 482 south of Aberdeen Avenue. The theater, building 485, and buildings in the 400 area on the east side of Maxwell Street. From the intersection of Maxwell Street and Aberdeen Avenue and underground primary line goes east west along the south side of Aberdeen Avenue extending to substation 2453 on Kirtland Drive at Letterman Avenue. An underground line goes south along the west side of Kirtland Drive from substation 2453 to substation number 25 and further south on Kirtland Drive to Clark Avenue where the line goes east to building 336. At the intersection of Clark Avenue and Carlisle Blvd the underground line goes north on Carlisle Blvd to Aberdeen Avenue. An east west branch of this line goes on Randolph Avenue to Doris Street and beyond in the east and to Kirtland Drive in the west. This line has multiple north south branches to building 5230 south of Randolph Avenue and to building 418 north of Randolph Avenue. Another north south branch underground line is on the west side of Chanute Street reaching to Aberdeen Avenue in the north and Lowry Avenue in the south supplying buildings in the 400 area.

There is an open space in the northwest corner of sheet 3 with Kirtland Drive on the west and Maxwell Street on the east. Primary power distribution in the area is by an overhead line from the sub feeder 1. A north south line on Carlisle Blvd goes east at Gibson Blvd and crosses Maxwell Street to supply housing buildings on the north side of Stockton Loop. This completes the description of power distribution on sheet 3.

Sheet 6: Six power distribution lines enter sheet 6 in the northeast corner of the sheet from sheet 5. All are overhead lines except the line on Pennsylvania Street. Two are PNM lines going south to the DOE area and are not included in the privatization project. Two of the lines turn west and go along the south side of Hardin Road. The 115Kv line joins a north south line at the intersection with 9th Street. This line came from sheet 5 in the north. It goes along the east side of 9th Street and ends in the south at building 981. The 46Kv line at Hardin Road and 9th Street turns southwest and back west. It turns northwest at Wyoming Blvd and goes off sheet 6 after crossing Hardin Road and goes to sheet 5. A north south 46Kv line from sheet 5 joins this line near the DOE Fuel Oil storage tank, facility 698. The line crosses Wyoming Blvd and goes south. A line branches west at the intersection with Ordnance Road. This line goes west to substation number 22 west of Pennsylvania Street and north of Glow Road.

Going back to Wyoming Road and Hardin Road, the north south overhead line has an east branch north of the intersection with Tosi Lane. This short line ends at substation 20612 north of Tosi Lane. The overhead 46Kv line crosses Pennsylvania Street and joins an east west line that goes west and southwest to substation number 18, facility 20726. The line goes east and southeast. It turns back east at the DOE boundary line and continues east. There is a north branch to substation 38 near building 986. The eastbound line joins a north south line at the DOE east boundary.

Notice in the southeast corner of sheet 6 that the PNM line going along the east boundary makes a turn west. It turns southwest and goes off sheet 6 to sheet 9.

Going back to the northeast corner of sheet 6, a north south 46Kv line goes the full length of sheet 6 and on to sheet 10. This is the line on the west of the six lines going south. The other

north south line going the full length of sheet 6 has an east branch near the northeast corner going from sheet 6 to sheet 7.

Sheet 7: The line on sheet 7 goes east along the military reservation boundary to a point north of well number 11 where it turns south and ends near Four Hills Road. This is the only power line on sheet 7. The north south line on sheet 6 has a west branch near the southeast corner of the DOE boundary. This line was described earlier.

Continuing on sheet 6: Going back to substation number 22 off Pennsylvania Street, the underground line coming south from sheet 5 splits into two overhead lines. One continues south and crosses Glow Road where it becomes an underground line continuing south. The other overhead line from the split goes southeast to building 20599 where it ends. An underground power line from substation 22 goes south to the VPD and HPD facilities south of Pennsylvania Street. An underground line from sheet 5 also goes to the VPD/HPD area. Branch lines go into the area. A line continues south to the Trestle Facility and ends at building 20797. An overhead line begins at well number 7 and goes southeast past the ARES Site to well number 8.

A pair of underground lines leave substation 22 going west to the ART Facility. One of these lines turns south. It goes along the east side of Munition Haul Road and off sheet 6 to sheet 9. The other underground line supplies well number 7 and continues west past the ART Facility and becomes an overhead line that goes off sheet 6 to sheet 4. It has a short branch that ends at building 791.

An overhead line enters sheet 6 from sheet 4 to supply power to the ammunition storage area in the southwest corner of sheet 6. This area is west of Munition Haul Road. This completes the description of primary power distribution on sheet 6 of the drawing set.

Sheet 9: a PNM line runs SW-NE to a point where it runs east west in parallel with a base line. The PNM line then turns northwest and goes to sheet 4. The base line runs east west along the south side of sheet 9. At the 27496 area the base line turns northeast to go to sheet 10.

Sheet 10: a PNM line runs from sheet 9 to sheet 10. It crosses Pennsylvania Street and goes to sheet 7. A base line from sheet 7 goes southwest to the Hazardous Waste Facility. The line ends at a point northeast of building 2805. Three base lines from sheet 6 enter sheet 10 and go south in parallel. One to the east has a branch east past the 3rd tee to building 28061 and on east to building 28053. These buildings are north of the golf course. This line continues south on the east side of Power Line Road. It turns southeast along the west side of the golf course to the clubhouse. Beyond the clubhouse the line splits with lines going northeast and southwest. The southwest line ends at the water booster station. The northeast line goes to the northeast corner of the confidence course where the line turns southeast. A branch line goes southwest at the riding stables. The line continues southeast to the DOE 30000 area at Manzano Road. It connects to a pair of overhead lines from sheet 11. These lines are SW-NW from sheet 11 across the corner of sheet 10 to sheet 13. Within the base camp area three lines go southwest to sheet 13. A SW-NE line from sheet 11 provides power to the Manzano base camp. This line goes around the west side of the camp to sheet 13.

Going back to the northwest corner of sheet 10, feeder line number 1 and feeder number 2 go south along the west side of Power Line Road. Feeder 2 is the line nearest the road. It has a

branch west to Prairie Road then northwest to substation number 40 located at the 27000 area. Feeders 1 and 2 leave sheet 10 to go south to sheet 13.

Sheet 13: Feeders 1 and 2 enter sheet 13 in the northwest corner of the sheet on Power line Road. (Notice the annotation appears to be reversed. Feeder 1 is to the west and feeder 2 is to the east on sheet 10.) Assuming the error, feeder 1 goes west at the DOE boundary then south to substation number 6 in the DOE area. Feeder 2 goes east at the DOE boundary. A branch line goes south and southeast to join feeder 1 at the security tower designated as 6599. This is outside the DOE area. The branch from feeder2 continues southeast and turns southwest past building 9956 and leaves sheet 13 at the southwest corner to go to sheet 15.

Going back to the point where feeder 2 goes east, the south branch just described begins at pole F1P49. The feeder 2 continues east and crosses DOE area 111 Road to Lovelace Road where a line goes southeast and off sheet 13 to sheet 16. In the northeast corner of sheet 13 there are four lines going southwest from sheet 11. These lines are on each side of Engineer Road. The pair of lines to the east goes to substation number 11, which also has a meter. (Need to determine if this is a government or utility meter.) The southwest line on the east side of Engineer Road ends at pole F2P21. The line on the west side of Engineer Road runs between two fence lines. There is an east branch at the intersection of Service Road and Engineer Road. The line continues south and turns east to substation number 11. The line continues south turning southeast, then east, and north as it follows the path of the double fences. It leaves sheet 13 and goes to sheet 14.

Sheet 14: In the southwest corner of sheet 14 a line enters from sheet 17 to the south. This line is along Demolition Range Road and ends at the TRS facility. In the northwest corner of sheet 14 two lines enter from sheet 13. One of these is the line in the double fences. It follows the path of the fences to the northeast. It leaves sheet 14 and goes to sheet 11. The other line goes northeast and connects to the line entering from sheet 11 at Igloo Road. It continues east and turns south at pole F3P120. It goes south along Igloo Road and ends at building 37040, pole F3P134.

Two lines enter sheet 14 in the northeast corner from sheet 11. One ends at pole F3P93. The other goes southwest on Igloo Road and ends at pole F3P118. A line enters sheet 14 in the southwest corner from sheet 17. The line goes northeast along Demolition Range Road and ends at the TRS facility.

Sheet 11: Two lines enter sheet 11 in the northwest corner and go southwest to sheet 13. One is the line on Engineer Road previously described as the line in the double fences going to substation number 11 on sheet 13. There is a branch line west to building 37200. There are five branches east to Service Road. The double lines merge to one at pole GF2134. A branch line goes southeast and leaves sheet 11 near building 37079 in the southeast area of sheet 11 and goes to south to sheet 14. Four lines leave sheet 11 at this area. The line to the east ends at building 37110, pole F3P146. The line in the center goes northeast and ends at building 37085. The line in the double fences is a continuation from sheet 14. There are three lines going north from sheet 11 to sheet 8.

Sheet 8: There are three lines entering the southeast corner of sheet 8 from sheet 11. The center of the three ends at building 37098, pole F3P257. The line in the double fences goes north

following the path of the fences turning west and back south leaving sheet 8 in the southwest corner going to sheet 11. The line to the left of the three goes north and northeast to a point near building 37011 where it turns southwest along Inside Road. It has multiple branches to buildings in the area. At pole GF2P66 it becomes a double line continuing southwest. There are two branches southeast to buildings 37515 and 37501. The double lines leave sheet 8 in the southwest corner and go to sheet 11.

Sheet 16: a line enters sheet 16 at the northeast corner going southeast from sheet 13. There is a southwest branch at pole F1P83 to substation number 19 at building 9939. The southeast line continues off sheet 16 to sheet 19. In the southwest corner of sheet 16 a line enters from sheet 19. The line goes northeast along the east side of Isleta Road. It crosses Isleta Road and turns southeast going off sheet 16 to sheet 17. In the southeast corner of sheet 16 a power line enters from sheet 9 going north. It turns east at Isleta Road and leaves sheet 16 to so to sheet 17.

Sheet 17: Two lines enter sheet 17 in the northwest corner. The one along Demolition Range Road is from sheet 14. It goes underground south across an abandoned airfield and ends at the PRIME BEEF Training area. The other line entering the northwest side of sheet 17 is from sheet 16. The overhead line goes southeast across Demolition Range Road. At pole F1P93 the line splits with one line going east and the other south. The south line leaves sheet 17 and goes to sheet 20. The east line has a north south branch south of the PRIME BEEF Training camp. This line goes south to building 29051 where a line goes east ending at the explosive test enclosure. As the line continues south there is a wet branch to substation number 9 located east of the CERL facilities. The line continues south and leaves sheet 17 to go to sheet 20.

Two underground lines enter sheet 17 in the southwest corner from sheet 16. One goes east to substation number 9. The one from the southwest goes northeast to substation number 9.

Going back to the split at pole F1P93, west of building 29014, the east bound line from the split goes southeast to pole F1P93-34 south of Mortar Range Road where the line parts with one line going northeast and the other southeast. The line going southeast leaves sheet 17 at pole F1P93-82 and goes to sheet 20. The line going northeast has a branch east along the south side of Mortar Range Road. The northeast line continues and leaves sheet 17 at pole F1P93-64 where it goes to sheet 14.

A south branch off the line at Mortar Range Road begins at pole F1P93-104 near building 66006. This line goes southwest along the fence line. It goes off the sheet to the south to sheet 20. This line has a NW-SE branch. The southeast end is at building 66045. The northwest ends turns north across Mortar Range Road. It goes northeast and ends at pole F1P93-40 of the parallel line. There are two lines entering sheet 17 on the south side. These lines are from sheet 20. The one to the east goes to building 66001 and the one to the west goes to building 66013.

Sheet 20: Three lines enter sheet 20 in the northwest corner from sheet 17. The line to the west is from the CERL area. It ends near the north side of sheet 20. The center of the three lines continues south on the west side of Lovelace Road. It has a branch west to substation number 12 in the 9200 area solar Collection Site. There is also a branch west to substation number 29 located in the DOE ITRI area. The north south line turns east at pole F1P114. It follows the fence line east to substation number 13 in the southeast corner of sheet 20. It connects with a north south line that came from sheet 17 to the northeast corner of sheet 20. This line goes to

substation number 20 that supports trailers in the 6600 area. It turns south at pole F1P136-26 and connects to the east west line at pole F1P136. A line from substation number 13 goes north and northwest and ends at the BRAB Site south of Target Road.

Sheet 19: Two lines enter sheet 19 from sheet 16 in the north. The one in the northeast corner goes south to pole F1P96-31 and turns west to pole F1P96-37 then north to substation number 34 located south of the Solar Thermal Test site. The line from sheet 16 to sheet 19 in the northwest corner is a NE-SW line from Isleta Road. It turns west at the fence line on the base boundary and goes off sheet 19 to sheet 18. There is a north branch that is a direct bury to a facility labeled as Sun Shade.

Sheet 18: The east west line on the south fence line ends at building 90002.

6. Add Areal Description for Kirtland Natural Gas Distribution:

KIRTLAND AFB NM
AREAL EXTENT DESCRIPTION
NATURAL GAS DISTRIBUTION
April 2003

Gas Company of New Mexico, a subsidiary of the Public Service of New Mexico (PNM), through seven main lines, supplies natural gas to Kirtland Air Force Base (KAFB). The east side of the base (sheet 4) is supplied at five points and the west side (sheet 2) by two points.

Specifically excluded from the natural gas distribution system privatization are:

- Compressed Natural Gas station at base fuels area, KAFB east side.
- All Public Service Company of New Mexico (PNM) owned natural gas lines on the base property including the 8" high-pressure main running along Pennsylvania, the 12" high-pressure main running along the northern boundary of KAFB and in between the North Water Detention Basin and Military Family Housing (MFH), and the 14" high-pressure main running along Gibson Boulevard to the PNM-owned district sub-station.
- Certain areas in the MFH are not included in this infrastructure project. The natural gas distribution systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the natural gas distribution system privatization. However, until the MFH privatization contractor can complete the isolation of the natural gas distribution system from the main base system, this area will temporarily remain the responsibility of this contractor.

All DOE-owned areas on the base. However, all utilities pass through DOE area's for which right of way documents from DOE will have to be negotiated per area. Some areas are secure and access is not allowed.

The majority of gas on base is delivered through a 14-inch high-pressure steel gas line at 60 pounds per square inch gauge (psig) into the PNM-owned metering station at the corner of Pennsylvania and Gibson Streets on the east side of the base. KAFB owns the system

downstream of this metering station. From there, gas is delivered to Sandia National Laboratories (SNL) through an Air Force-owned 12" high pressure line that feeds Sandia's steam plant and the eastern area of KAFB. A PNM-owned 8" high-pressure steel line located behind the Base Exchange provides for an emergency feed for this 12" steel line.

The second entry point on the east side is located at the Eubanks gate through a 6" polyethylene (PE) line that also feeds the eastern portion of KAFB.

Just south of the Eubanks gate, a third entry point feeds the southern area of KAFB including the Department of Energy's (DOE) area to the south (DOE Area II and Lovelace).

Also located at the Eubanks gate is a fourth entry point that supplies only the Air Force Safety Center. (This line is not shown on sheet 4.)

The fifth entry point is through a 6" steel line entering the housing area north of the intersection of Louisiana Boulevard and Ridgecrest Drive. KAFB takes ownership of all of these lines downstream of the PNM-owned meters.

On the west side of the base, gas enters through a 4" PE line next to a PNM-owned regulator and metering station at the Carlisle Gate.

Just east of the Truman gate, a 6" PE line enters the base through a PNM-owned regulator and meter near the VA hospital.

Beginning points of demarcation (POD) are the first piping connection downstream (load side) of each PNM natural gas meter station serving Kirtland AFB. Ending PODs are where the gas line enters a building beyond a regulator or meter. The intent of this areal description is to give a general flow pattern of the natural gas distribution system. Every line on every street may not be mentioned. This description is based on drawings provided by the base civil engineer office. Title of the drawing set is "Department of the Air Force, AFMC, Kirtland AFB NM, Natural Gas Distribution. Basic date is 8 October 2002. Tab reference is G-6. There are 12 drawings in the set. Most of the gas distribution system may be found on drawings 2, 3, 4 and 5 but there gas lines on all drawings in the set. The areal description is intended to stand-alone but due to the multiple references to valves, streets and buildings access to the drawings or the AutoCAD file will facilitate in following the general distribution pattern.

Excluded from the privatization process are the PNM owned equipment on base. This includes lines and the meters and associated equipment at the entry points.

Looking at sheet 4, the PNM high-pressure line enters the base in the northeast corner of the perimeter as goes west along the south side of Southern Avenue. The PNM line is exempt from privatization. The path is included here for clarification on the entry point. The PNM line turns south at Wyoming Avenue to a point east of the Wyoming Gate House and continues west along the fence line. The PNM line turns south near the water storage tank at well number three. It goes around the west side of the Commissary parking lot and crosses Gibson Blvd where it turns east to the PNM Gas Substation located south of Gibson Blvd and the Gibson Gate. There are a 14-inch and a 6-inch high-pressure line from the PNM gas substation going west along the south side of Gibson Blvd. The 6-inch line ends at Louisiana Blvd. The 14-inch line becomes a 6-inch line and turns south at Louisiana Blvd to a PNM Gas Regulator Station located west of building 1849 in the housing area.

From the Gibson Gate, a 12-inch high-pressure line goes north south along the east side of Pennsylvania Street. The drawing designates this as a utility owned line. This is designated as a stand-by line. According to the drawing the PNM line ends at the intersection of Pennsylvania and Gibson Blvd. Begin point on the drawing is the intersection of Pennsylvania Street and Southern Avenue.

From the PNM gas substation at the Gibson Gate, the base distribution system goes east to a north south line on Pennsylvania Street. The 12-inch line has two branches east; one to the covered pool and one to the gym. The line turns east on "G" Avenue. At the theater the line crosses from the north side of "G" Avenue to the south side. At Wyoming Blvd the line turns south and ends north of the intersection with "K" Avenue at building 20605 in the DOE area. The north extent of this line on Pennsylvania Street from the meter station goes past the Gibson Gate and turns northeast at Maple Court to supply buildings in the housing area. South of Maple Court a branch to the west supplies the Commissary, building 20180. A west branch off Pennsylvania Street supplies the housing buildings west of Pennsylvania Street.

At the intersection of Pennsylvania Street and Gibson Blvd a six-inch line goes east west. Service to the Base Exchange, building 20170, is off Gibson Blvd. At the Child Care Center, 20160, the line joins a north south line going into the housing area to the north. The south end of this line goes east at Gibson Blvd and joins a north south line at a junction tee at the intersection with 2nd Street. The north end of the line along the east side of 2nd Street turns east at the Chapel, building 20170. It turns north at 4th Street and ends at "B" Street. A branch of the east at the tennis courts goes north at Wyoming Blvd then northeast to a junction tee near building 8897 where the gas service enters the housing area east of Wyoming Blvd.

A junction tee on 2nd Street at the Post Office, building 20216, has a branch line to the east to the Fire Station, building 20210, where it goes south along 4th Street across "G", "H", and "I" Avenues. It turns west at building 20349 and south at 20338 past the static display and museum to "M" Avenue where it turns east to building 20604 and south to end at building 20698. A branch line to the east begins at a valve near the southeast corner of building 20663. The east line goes to building 20707 where it turns north then east to end at the DOE building 894 on 9th Street.

A PNM line that ends at a gas regulator station on Louisiana Blvd north of Ridgecrest Avenue supplies natural gas distribution service to the housing area east of Louisiana Blvd and west of Pennsylvania Street. The gas substation is near building 18419.

A five-inch line on Randolph Street provides gas distribution to the Air National Guard area of Kirtland AFB. The line is an east west line from sheet 2 to sheet 4. The line turns south at a point west of the intersection with Super Saber Drive. The line goes south across Air Guard Road with gas service to buildings on both side of the street. The line ends at building 1046. An east west line within the Air Guard area begins west of building 1053. The line goes east to building 1054. It turns northeast and ends at well number 16, facility 25952. There are two north south lines in the Air Guard area. The east of these two begins at a junction tee west of building 1054 and goes south along the rear of buildings on the west side of Falcon Drive. It goes to sheet 5 south to Southgate Avenue and ends at the Art Facility, building 2635, off Target Road. The west of the two north south lines begins at building 1077. It goes south with multiple branches

east and west to supply buildings in the area. The line ends at building 1030. A line branches southwest at building 1050 and ends at building 1031.

Looking at sheet 5, a north south line from sheet 4 goes to the west of Southgate Avenue. It passes to the east of the barrier (BAK-9) and turns west past the fence line then to a point where it turns southeast of Target Road and ends at the Art Facility, building 760. The east west line along the north side of Southgate Road goes west to sheet 3.

Looking at sheet 3, the north south line from sheet 2 crosses the runway area passing to the west of A10 and turning east then south at well number 2. The line turns east at Ammo Road and ends at buildings 749, 756, and 750. An east west line from sheet 5 goes along the south side of the runway. It passes near the line from sheet 5 and does not interconnect. At the west side of the arm-dearm apron the line goes southwest to a junction tee where a two-inch line goes south at the east side of building 610 to supply buildings 733 and 737. At the junction tee near the arm-dearm apron the east west line continues. There is a south branch to a facility west of building 641. (Need a building number.) The line continues east west with a south turn west of building 626 to a junction tee west of building 618. A branch line goes south then east to supply buildings 619, 620 and an unnumbered building west of building 617. A north south branch goes to the edge of the runway east of pad 1. The line goes south of ramp 8 off Cell Drive then southwest across Southgate and southwest along the west side of Southgate. The line turns west near the abandoned small arms range past the FAA Tower and ends at building 734.

Looking at sheet 2, an east west line on the south side of Gibson from building 4111 on the east end to the intersection with Carlisle Blvd SE on the west end of the sheet. From a junction tee at building 4105 a north south lines off Gibson go north on the west side of Washington Street SE to building 4062. A line goes west between buildings 4048 and 4050 across Mercury Circle to building 4049. From building 4064 the line goes west to supply buildings on the north side of Mercury Circle.

Multiple north south lines branch off the east west line on Gibson. At building 4111 on the south side of Gibson a pair of lines go south. The one to the east of the pair goes to building 585, Gym, and branches east then south across Aberdeen Avenue. This line crosses Biggs Avenue, Park Avenue, and Hercules Way and ends at building 1001 on Hangar Road. An east west line goes along the north side of Biggs Avenue to supply buildings in the 900 area and the south side of Randolph Avenue to buildings in the 1000 area. Other east west branches go through the middle of the block to Eileen Street and Francis Street. The line on Biggs Avenue goes east to join a north south line on Truman Street. The line continues east to a north south line on San Mateo Blvd. Notice a six inch high pressure line owned by PNM goes north south along the west side of San Mateo Blvd to the VA Hospital. The PNM line stops at building 907 a two-inch line off San Mateo continues south to the flight line facilities.

Going back to the pair of north south lines off Gibson at building 4111, the west of the pair goes west at the rear of building 4119. It crosses Charlene Drive and passes across the playground to supply buildings on Ivy Place and across Maxwell Street to join the north south line on Carlisle Blvd SE. This east west line has a north south branch on Charlene Drive where it

branches east west to supply buildings on Jason Circle. Another north south branch is at the rear of building 4133 to 4137 where it goes west to supply buildings on Stockton Loop.

A north south branch at the junction tee in the playground goes south to Bernice Drive where it turns east west to building 595 in the east and building 3914 in the west. The north south line on the east side of Maxwell Street goes north and crosses Gibson to provide a line into the housing area north of Gibson Blvd. The south reach of this line turns southwest at the intersection with Bolling Avenue. It follows the east side of Bolling Avenue to Hamilton Avenue where it turns north crossing Randolph Avenue and Lowery Avenue and goes along the west side of Chanute Street to building 499. The line on the east side of Bolling Avenue goes from building 376 southwest to building 378.

At the intersection of Lowery Avenue and Chanute Street a line goes west to Carlisle Blvd SE where it joins a north south line on the east side of Carlisle Blvd SE. The south extent of this line is to the intersection with Clark Avenue where it turns west to Kirtland Drive. The north reach of this line is to the intersection of Carlisle Blvd SE and Gibson where it joins the east west line on the south side of Gibson. There are two north south lines in parallel at the intersection of Carlisle Blvd SE and Gibson. The one to the west was described in the sentence above. The one to the east goes south to a point north of the parking on Aberdeen Avenue and goes east to joining the north south line on Maxwell Street.

There are several east west lines off the north south line on Carlisle Blvd SE to supply buildings on both sides of Carlisle Blvd SE. An east west line at the intersection with Randolph Avenue goes west to Kirtland Drive. This line goes north along the west side of Kirtland ending at the Kirtland Gate. Notice that the line to the school on Gibson at Carlisle is a city utility owned line. The line to the DOE facilities, buildings 481 and 482, comes off the north south line on Maxwell Street. This line also supplies building 426 on the west side of Maxwell Street. A line off Maxwell Street supplies buildings 424 and 425.

At the intersection of Clark Avenue and Kirtland Drive a line goes north along the west side of Kirtland Drive to buildings 277 and 278 and building 329 on the east side of Kirtland Avenue.

There are six east west lines across the open space east of Carlisle Blvd SE and south of Gibson Blvd. Lines at the top, bottom and middle go across the space and connect with a north south line on the east side of Carlisle Blvd SE. The other two lines terminate near the west side of the space. (Need to know if these are abandoned lines. From the drawing, sheet 2, they appear to be active lines.)

Sheet 6: A north south line on sheet 6 goes along Power Line Road past the golf course. At the intersection with Pennsylvania Street a line branches southeast along Pennsylvania Street at the Club House. It passes through the riding stables and ends at Vandenberg Road and “D” Road in a DOE area.

Going back to the intersection of Pennsylvania Street and Power Line Road, the 6-inch gas line continues south. There is a west branch at Prarie Road that ends at building 20497 in the GMV area. The 6-inch line on Power Line Road continues south off sheet 6 to sheet 7.

On sheet 7 the north south line goes along the east side of the DOE boundary. It becomes an 8-inch line and leaves sheet 7 to sheet 8. On sheet 8 the 8-inch line turns southeast and goes off sheet 8 to sheet 9 at a point north of Isleta Road. On sheet 9 the gas line turns south at Lovelace Road. It becomes a 2-inch line at the CERL area and leaves sheet 9 to go to sheet 11. On sheet 11 the line continues south on Lovelace Road. It turns west at the Solar Collection Site. The ned of this line is on sheet 10 at the fuels storage area.

7. Add Areal Description for Kirtland Water Distribution System:

KIRTLAND AFB NM
AREAL EXTENT DESCRIPTION
WATER SYSTEM
April 2003

The intent of this areal description is to give a general flow pattern of the sewer system. Every line on every street is not mentioned. This description is based on drawings provided by the base civil engineer office. Title of the drawing set is "WATER SUPPLY SYSTEM, KIRTLAND AFB, Scale: As Shown, date 18 Apr 2002, Tab G-01-01". The areal description is intended to stand-alone but due to the multiple references to streets and buildings, access to the drawings or the AutoCAD file will facilitate in following the general distribution pattern. Specifically excluded from the water distribution system privatization are:

- Water irrigation systems
- Water Rights will remain with KAFB
- Military Family Housing (MFH) utilities are not included in this project. The water systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the water distribution system privatization. There will be water lines going through the area involved in this contract since they connect Air Force facilities on one side of the area to facilities on the other side of the area. However, until the MFH privatization contractor can complete the isolation of the water distribution system from the main base system, these areas will temporarily remain the responsibility of this contractor.
- All DOE-owned areas on the base. However, all utilities pass through DOE area's for which right of way documents from DOE will have to be negotiated per area. Some areas are secure and access is not allowed.

From a city owned meter located north of the intersection of Club Road and Club Drive, a line runs east to the east side of 18th Street and turns south to the intersection of 18th Street and "G" Avenue where it turns west to the intersection of the NCO Bypass and then turns south into the DOE area. From this line, north of "G" Street, a loop runs to the east around Building 24499.

Beginning at the metering station to the city owned line, southwest of the intersection of Texas Street and "K" Avenue, a line runs south to the Pumping and Storage Facility. Also connecting to this facility is a line from the west that begins at Well Facility 20374. A line runs

north out of this facility to a "T" connection on "K" Avenue. The line on "K" Avenue starts in the west at a connection to a line on the east side of Pennsylvania Avenue and extends east to the intersection of 1st Street where it turns north a short distance before continuing east, south of Building 20349, to the west side of Wyoming Blvd. and connects to a line running south. The line on the west side of Wyoming Blvd. begins in the north at a connection point at the intersection of West Sandia Circle and runs south to the southeast corner of Building 20451.

Connecting to the Wyoming Blvd. line at the intersection of "D" Avenue is a line that begins in the west at a metering station to the City owned supply line at the intersection of Louisiana Blvd. and Gibson Blvd. It then runs east, along the north side of Gibson Blvd. to the point where the street turns to the southeast. The water line continues east, to the northwest corner of Building 20140, where it turns south to loop around the south side of Building 20147 before continuing east to its connection point to the Wyoming Blvd. line and then continuing east to connect to a line on 18th Street northeast of Building 1391.

Beginning at the Club Road intersection with Club Drive, a line runs south, following the west and south sides of the Club Drive loop to the west side of 18th Street where it turns south to the south side of the "A" Avenue intersection where it connects to a line on "A" Avenue. This line connects to the line to the line on the east side of 18th Street on the east and extends to the west to a pressure-reducing valve on the west side of 15th Street. Also connecting at the intersection of Club Road and Club Drive, a line runs west to the northeast corner of the soccer field and then turns a short distance south to a pressure-reducing valve. Connecting to this line at the intersection with 15th Street is a line running south on the east side of 15th Street and connecting to the "A" Avenue line on the south.

From a connection point to the line on East "A" Avenue southeast of Substation 3, a 10-inch line runs south to a connection point on the "D" Avenue line a little east of the intersection of Erwin Street. Another line connecting to the "D" Avenue line immediately east of Erwin Street runs south along the east aide of the street to an intersection point with a line on "F" Avenue and continues south to a "T" connection at NCO Bypass and continues south into the DOE area. From the connection point at "F" Avenue and Erwin Street lines run both east and west. The line to the east runs along the south side of "F" Street to the east side of Foster Street and then turns north to connect back to the "D" Avenue line on the east side of the Foster Street intersection. The line running to the west follows the south side of "F" Avenue to 7th Street and then turns north along the east side of 7th Street to connect back to the system at "D" Avenue. From the line on 7th Street a line runs directly west and connects to the Wyoming Blvd line at the south side of the intersection of Gibson Avenue and continues west and connects to a line on the east side of Texas Street. The line on Texas Street begins at a connection point on the line north of Gibson Blvd and runs south to the Pumping and Storage Facility. It then continues south and terminates on the east side of Texas Street to the east of Building 20417.

Beginning at a connection point on the west side of Texas Street and north of Gibson Blvd, a line runs north to a point northwest of the Child Care Center and then turns east along the south side of "B" Avenue and connects to the line on Wyoming Blvd. There are north-south lines on 2nd and 4th Avenues that connect between "B" Avenue and Gibson Blvd. There is also a line connecting to "B" Avenue on the west side of 1st Street that runs south and connects to the line from the north side of Gibson Blvd near the northwest corner of Building 20140.

Beginning at a connection point on the Gibson Blvd line at the intersection of Pennsylvania Street, a line runs south to "K" Avenue. Three lines connect to this line and run to the east. The first begins at the intersection of "F" Avenue and runs to a connection to the line on 7th Street. The second begins at "G" Avenue and connects to the Wyoming Blvd line. The third begins at the intersection of "H" Avenue and connects in the east at a line on the east side of 1st Street. The line on 1st Street begins in the north at a connection point on the line that loops around the south side of Building 20147 and runs south to a termination point southeast of Building 20360. A line connection to the 1st Street line east of Building 20360 runs east along the south side of "I" Avenue and connects to the Wyoming Blvd line. From a connection on the "I" Avenue line north of Building 30339, a line runs north, along the west side of Building 20245, and connects to the line on "F" Avenue. There is also a line that runs east of the bank, Building 20320 that connects "I and "G" Avenues.

From a connection point on the Pennsylvania Street line near the north end of the football field, a line runs west to the Wherry Elementary School. Also connecting to the Pennsylvania Street line are lines at Conner Avenue and Ridgecrest Avenue that run to the west and provide service to a network of lines on every street in the Zia Park Housing Area. A line connected to the Zia Park Housing system at the south end of San Pablo Street runs south, around the west side of the Playground where it connects to an east-west line at a pressure reducing station and 24-inch line on the south side of the playground. This 24-inch line runs from a connection point to a Texas Street line on the east to a connection point in the National Guard Area near Building 10030 in the west.

Beginning at a connection point on the Wyoming Blvd line at "K" Avenue, a line runs east to a point northeast of Building 20602, where it connects to a line from the south before entering the DOE area. The line to the south runs along the east sides of Buildings 20602 and 20604 to a connection point southeast of Building 20677. From a connection point on the Wyoming Blvd line at the intersection of "M" Avenue a line runs east to Building 20604 and then turns south to connect to a line that runs along the south side of Building 20687. This line begins in the east at a connection point on the west side of Building 20676 and runs west, on the south side of Building 20687, and connects to a north-south line at the southwest corner of that building. The north-south line begin from a connection point on the line between Wyoming Blvd and Building 20604 and runs south, between Buildings 20663 and 20686, to the south side of Hardin Blvd where it turns west and then south to a connection point at the southeast corner of the intersection of Hardin Blvd and Wyoming Blvd.

Beginning at a connection at the southwest corner of Building 20604, a line runs east and connects to a line on the east side of Building 20676. The line on the east side of Building 20676 begins at a connection point on the east side of Building 20604 and runs east to the DOE property line where it turns south and connects to the Hardin Blvd line southwest of the intersection with 9th Street. A line connecting to the Hardin Blvd line northeast of Building 20717 runs north and connects back to the system at the northwest corner of Building 20676. A line connecting at the southwest corner of Building 20683 runs west and connects to the system on the north side of Hardin Blvd near DOE Facility 697.

There are two 10-inch lines connecting between Texas Street and Wyoming Blvd in the vicinity of "M" Avenue. The first runs along the north side of Building 20414 and the second runs on the south side of Building 20415. From a connection point on this line at the west side

of 3rd Street a line runs south and then turns east, between Buildings 20420 and 20423, and connects to the Wyoming Blvd line.

A line beginning at the Pumping and Storage Facility runs to the south, along the east side of Texas Street to the south side of Hardin Blvd and turns east to a connection point east of 9th Street near the DOE property line and continues across DOE property to the intersection of power Line Road where it turns south between the road and the fence line to the point where the fence turns to the east. There the water line turns east, just inside the fence line. The line turns to the southeast immediately east of the point where the point where it crosses Tijeras Arroyo and then turns east at the air relief valve and runs on the south side of Well No. 11 before continuing to the reservoirs located on the south side of Four Hills Road. There is also a second line running parallel to and immediately north of this line from the reservoirs to the DOE property line at the point east of Power Line Road. From a connection point on this line east of the DOE property line, an 18-inch line runs south along the east side of Power Line Road to the point where the road crosses Tijeras Arroyo and the water line. The water line continues south, but now on the west side of the road, to connection points on the north side of Pennsylvania Street and Prairie Road to the northeast corner of the DOE Area III site.

The line connecting the Power Line Road line at Prairie Road runs to the west along the north side of Prairie Road to Building 27494 and then feeds into the KUMSC Area. From the connection at the intersection of Power Line Road and Pennsylvania Street, a line runs to the southeast along the north side of Pennsylvania Street to the south side of the Riding Club and then turns east to Pump Station No. 1. From Pump Station No. 1 the line continues east to Pump Station No. 2, which feeds the Manzano Area. Also from the connection at the intersection of Power Line Road and Pennsylvania Street, a line runs to the northeast along Pennsylvania Street and connects to the 24-inch line to the east of Facility 20417. From a connection to the Pennsylvania Street line on the west side of Wyoming Blvd, a line runs to the southwest, looping around the northwest side of the ARES Site to Building 20749.

Beginning at the Pumping and Storage Facility, a 16-inch line runs southwest to the east side of Pennsylvania Street and the follows the street to the south to the south side of West Ordnance Road. It then turns west to a connection point on the west side of Pennsylvania Street. The connecting line follows the west side of Pennsylvania Street to the south, continuing south when the street turns southeast, to Well No. 4. From Well No.4 a line runs southeast to Well No. 8. From a connection point south of Trestle Road on the line connecting the two wells, a line runs southwest to Facility 20794, a 100,000-gallon reservoir. This reservoir feeds a 10-inch loop around the Trestle Facility and also the Trestle Fire Pumping System.

From the connection point at Pennsylvania Street and West Ordnance Road, a line runs west to the east side of Southgate Avenue where a line to the fire hydrants at Pad No. 5 connects. The line continues west to a point northwest of Well No. 7 and turns south to the north side of Southgate Avenue. It then turns west to a point east of Target Road where a line from Building 759 connects from the south. The line continues along the north side of Southgate Avenue, through a pressure-reducing valve, to a connection point on a line from the north side of the airfield.

Beginning at Well No. 16, a line runs south and then southeast and connects to a line on the outside of the Randolph Avenue curve. The south branch of the Randolph Avenue line

follows the road to a connection to the line running on the south side of the Zia Park Housing Area. The line continues a very short distance south before crossing to the west side of Randolph Avenue. It then continues south to a point northeast of Well No. 7 on the west side of Southgate Avenue and turns west, north of the well, to a point northeast of the ART Facility and then turns south to a complex of valves at the northwest corner of Building 760 at the ART Facility. The line continues south to the southwest corner of the building and turns east to the southeast corner of Building 765 then turns north to the northeast corner of the building. At this point a line connects that feeds a loop around Pad 4. Continuing from the northeast corner of Building 765, the line runs west to the northeast corner of Building 761, then northwest to the ART Facility parking lot, then north to Fire Hydrant W702 and east to a point north of the valve complex and finally south to connect back to the system.

Beginning at the connection point on the Randolph Avenue line near Well No. 8, the 24-inch line runs west on the north side of Randolph Avenue to a junction at the west side of San Mateo Blvd where it is joined by a line from Well No. 15. The line continues, now on the south side of Randolph Avenue, west to a connection to a line on the west side of Truman Street. A line on the north side of Randolph Avenue runs parallel to this line between San Mateo Blvd and Truman Street.

National Guard Area

From the connection point east of Building 1030, a line runs northwest to a point south of Building 1050 and then turns north past the east side of Building 1059 and along the west side of Corsair Drive to the northeast corner of Building 1060. It then turns west and loops around the south side of Building 1077 and the north side of Building 1063 before running between Buildings 1043 and 1052 to the west side of Super Saber Drive adjacent to the northeast corner of Building 1053. It then turns south to a junction point on the west side of Taxiway M6 at the entrance to the aircraft-parking pavement. The connecting line runs back to the east, around the south side of Building 1030 to the connection point on the east side of that building. There is also a line that connects northeast of Building 1059 and runs west, across the north side of the aircraft-parking pavement, and connects near the east side of Building 1047.

From the connection point at Taxiway M6 and the entrance to the aircraft-parking pavement, lines loop around the perimeter of the storage tank area and continue northwest along Fuel Drive and connect to a line that begins on the east at the connection point near the northeast corner of Building 1045. Another line connects near the northwest corner of Building 1045 and runs south to the southwest corner of Building 1047 before turning east and connecting back to the line running along the east side of that building.

From the northwest corner of the Fuel Area, a line runs west, south of the Storage Magazine, and connects to a line on San Mateo Blvd near the northwest corner of Building 1037. From this point, a line runs north, along the east side of San Mateo Blvd to the a junction point northwest of Building 1029. The connecting line at this point extends east to the connection point at Fuel Drive. From a connection on this line a line runs north to the northwest corner of Building 1049 and then turns west to the southwest corner of Building 1025 and then returns south to connect to the original line.

Two lines run south from the connection on San Mateo Blvd, northwest of Building 1037. The first line runs slightly west of the second and crosses the airfield before connecting to

the line on Southgate Avenue near the west end of the Arm-Dearm Apron. The second line runs to the southwest corner of Building 1037 where a line from the vicinity of Building 101 connects from the east. The line then continues to the southwest corner of Parking Apron E and turns west, along the south side of the apron to the west side of AICUZ Ramp 5. Here it turns north and connects to a line on Hercules Way, southwest of Well No. 14. From this point lines run both east and west. The west line extends to the edge of Taxiway M7, and then follows the edge of the taxiway to the northwest before turning north and connecting to a line on Randolph Avenue at a point south of Building 984. The east line runs along the north side of Hercules Way to Frances Street and then continues east to San Mateo Blvd where it turns south for a short distance to the connection point northwest of Building 1029. Two lines run along the south side of Randolph Avenue from Truman Street to the connection point south of Building 984. From this point a single line on the south side of Randolph Avenue extends west and connects to a line along the west side of Parking Apron B. A line runs north from Well No. 14 and connects to a line on Randolph Avenue. There is a line beginning at a connection on Randolph Avenue west of Building 1004 that runs south and then east to the deluge facility water tank, Facility 2483.

Beginning at the intersection of Randolph Avenue and Truman Street, a line runs north on the west side of Truman Street to Building 511 at the Truman Gate. From a connection on this line east of Building 941, a line runs east to Building 910. Beginning at a connection point on the Truman Street line on the south side of Aberdeen Avenue, a line runs west along Aberdeen Avenue to the elevated water tank, Facility 2474, and then continues west, on the north side of Aberdeen Avenue to the median of Project Drive where it turns to the north and connects back to the system on Avenue "A". From a connection point on the Aberdeen Avenue line, east of the static display at Doris Street, a line runs south to the north side of Building 956, then loops around the west side of that building and Building 949 to the south side of Biggs Avenue, south of Building 948. It then runs east, on the south side of the street and connects to the Truman Street line. North-south lines on the east side of Frances and Eileen Streets connect the Randolph Avenue line with the Biggs Avenue line. A line through the parking lots between Buildings 942 and 957 connects Biggs Avenue with Aberdeen Avenue.

From a connection point on the Aberdeen Avenue line on the east side of Charlene Drive, a line runs north to Jason Circle. A line runs completely around Jason Circle. A line connected to the north side of Jason Circle runs between Buildings 4101 and 4147 and connects to a line on the south side of Gibson Blvd. From a connection to the Charlene Drive line west of the baseball field, a line runs west to Building 592, then loops around the north side of the building to the southeast cornet. From the northwest corner of this loop, a line runs southwest, between Buildings 3911 and 3920 to the south side of Ivy Place where it turns west and connects to a line on the east side of Maxwell Street. The line on Maxwell Street begins at a connection point on a line on the south side of Aberdeen Avenue and runs north, Across Gibson Blvd, to a point west of Building 1914, and then turns north and connects to a loop around Building 1900. From the north portion of this loop a line runs north and connects to a line on Mercury Circle southeast of Building 4088. From the southern portion of the loop, a line runs southeast, between Buildings 1525 and 1551, to the north end of Castle Place and then south to connect to a line that runs completely around Mercury Circle. From the southeast corner of Mercury Circle a line runs southeast, between Buildings 4040 and 4042 to Washington Street SE where it turns south and connects to a line on the south side of Gibson Blvd.

Beginning at the connection point at the Washington Street intersection, a line runs west along the south side of Gibson Blvd to Well No. 12, just to the east of Carlisle Blvd. It then runs south through the well site to the intersection of Avenue "A" and turns west to the north end of

Hickam Street, then south to Scott Avenue, east to Kirtland Drive and north to complete the loop around the Building 201 site.

From Well No. 12, two lines runs south along the east side of Carlisle Blvd to the south side of Lowry Avenue. Both lines then cross to the west side of Carlisle Blvd. One line continues to the west, connecting at the water storage tanks. The other line turns south to Randolph Avenue and then west to connect to the water storage tanks. From the water storage tanks this line continues west to a closed valve at the base property line. Beginning at a connection to the Randolph Avenue line east of Building 253, a line runs north to a point south and slightly east of the intersection of Hickam Street and Selfridge Avenue where it turns east to Kirtland Drive then south on the west side of Kirtland Drive to connect to the Randolph Avenue line. Two north-south lines connect the north end of this loop with the loop around Building 201. Four lines connect between Kirtland Drive and Hickam Street in this area. The first runs along the north side of Lowry Avenue; the second runs south of Building 243; the third is located on the north side of Letterman Avenue and the fourth is located about midway between Letterman and Selfridge Avenues.

A line connected to the Kirtland Drive line northwest of the park, Facility 2544, runs east to the curve at the west end of Avenue "E" and then follows the south side of Avenue "E" to a connection on the Project Drive line. A line connection at the Avenue "E" curve follows the east side of the unimproved road to the north past the point where this road curves back to the east. Here it crosses the road and continues north-northeast and connects to a line a little way south of Avenue "A". This line begins at a capped dead-end near the west side of Kirtland Drive and runs east to connect to the line on Project Drive.

Beginning at a connection to a line on the south side of Randolph Avenue, a line runs north along the east side of Henderson Street to Building 413. A line connected to the Henderson Street line south of Building 405 runs west and connects to a line on the west side of Carlisle Blvd. From about the mid-point of this line, a line runs north, between Buildings 402 and 405 and then turns west across the north side of Building 405 and connects to the Henderson Street line. The line on the west side of Carlisle Blvd begins at Fire Hydrant W404 on the north and runs south to connect to a line on the north side of Lowry Avenue. The line on the north side of Lowry Avenue begins a connection point Henderson Street line and extends east to a connection with a line on the northwest side of Bolling Avenue. The line on Bolling Avenue begins at a connection to a line on the east side of Carlisle Blvd at the intersection with Mather Avenue and runs west to the north side of Bolling Avenue and follows the side of the street to the connection at Lowry Avenue before turning north and terminating at Fife Hydrant W425 west of Building 481.

From the connection point at Lowry and Bolling Avenues a line runs southeast and connects to a line that runs along the northwest edge of Parking Aprons B and C. This line begins at a connection to a line that runs along the south edge of Parking Apron D and runs north to the east end of Clark Avenue before turning to the northeast along the edge of Parking Apron B to the southwest side of Parking Apron C. From this point it turns northwest a short distance and the turns to the northeast, along the southeast sides of Buildings 481 and 482 to the east corner of Building 482. It then loops around the north side of the building to the west corner at the east end of Aberdeen Drive and runs west along the south side of Aberdeen Drive to the east side of Chanute Street where it turns south and connects to the Bolling Avenue line. A line

connecting Aberdeen and Lowry Avenues runs along the west side of Maxwell Street. From a connection point on the Chanute Street line at Sherman Avenue, a line runs to the north side of Building 467 and turns south to connect to an east-west line that begins at the Chanute Street line and runs east, along the north side of Building 425 and connects in the east at the line to Fire Hydrant W425.

Beginning at a connection to the Chanute Street line on the north side of Randolph Avenue, a line runs west to the east side of Carlisle Blvd where it crosses to the south side of the street and then turns west, crosses to the west side of Carlisle Blvd, and connects to a line on the south side of Randolph Avenue. The line on the south side of Randolph Avenue begins at a fire hydrant north of Building 381 and extends to the west to the west side of Kirtland Drive. It then turns south to a line on the north side of Clark Avenue. This line begins at Fire Hydrant W309, near the east side of Parking Apron A, and flow extends east, along the north side of Clark Avenue to the west side of Carlisle Blvd. It then runs north to connect to the line on the south side of Randolph Avenue. B The lines on Randolph and Clark Avenues are also connected by a line on the east side of Henderson Street. A line to the west of Building 323 connects Henderson Street and Kirtland Drive. The Henderson Street line is connected to the Carlisle Blvd line by a line running along the south side of Building 325.

A line that begins at the southeast corner of Parking Apron A extends to the east, along the south edge of Parking Apron D, and connects to the system at the west end of Parking Apron E. This line is also connected to the Clark Avenue line by a line that runs between Buildings 332 and 333. A line along the north edge of Parking Apron D connects between the line on the west end of Parking Apron E and the line on the Northwest edge of Parking Apron B.

Beginning at a connection point on Hercules Way southeast of the southwest corner of Building 1010, a line runs north to the south side of Building 1010 and then turns west to a point south of the east end of Building 994. It then turns north and connects to the Randolph Avenue line. From the Hercules Way line, lines run south to Buildings 1000, 1001 and 1002 as well as the wash rack.

From the west end of the Arm-Dearm Pad, the Southgate Avenue line continues to the southwest to a point east of Building 614. From this point it turns to the west to a point northeast of Building 611 where it turns to the south to the southeast corner of the building. It then runs west, along the south side of Buildings 613 and 614 to a four-way connection south of Building 622-3. The north branch from this point runs just to the east of Building 622-3 to Fire Hydrant W606 on the north side of the site and turns east to a point near the southwest corner of the Arm-Dearm Pad. The line then runs southeast to the west side of the site fence line and then south to connect to the original line. A line connecting northwest of Building 603 runs south along the west sides of buildings 603 and 608 to a point northeast of Building 614 where it turns east and connects at the point northeast of Building 611. The south branch from the four-way connection crosses to a point well south of Southgate Avenue and then turns southwest and finally west to a connection point at the east side of Building 707 before continuing west to a fire hydrant north of Building 709. From the connection point east of Building 709 a line runs south to AICUZ Ramp 8 and continues southwest to the west side of Southgate Avenue. It then follows Southgate Avenue around the end of the runway to the FAA facility and continues, taking an irregular path to the north and south, terminates at Building 734.

The western branch of the four-way connection takes an irregular path to the west, detouring slightly to the south, before continuing west to the southwest corner of Building 638.

Beginning at a connection to the Southgate Avenue line where it turns from southwest to west, east of Building 611, a line takes an irregular path to the southeast to the east side of Building 737. From a connection to the Southgate Avenue line just outside the site fence line, east of Building 611, a line runs south-southeast to a connection point inside the fence line and northeast of Building 733. The line it connects to begins at a fire hydrant near the southwest corner of Building 733 and follows the fence line to a point north of Building 737 where it turns to the southeast and terminated at a fire hydrant on the east side of the building. There is also a short line running to the southeast along the southwest side of Building 737 that terminates at a fire hydrant southwest of the building.

8. Add Areal Description for Kirtland Wastewater System:

KIRTLAND AFB NM
AREAL EXTENT DESCRIPTION
SEWER SYSTEM
April 2003

The intent of this areal description is to give a general flow pattern of the sewer system. Every line on every street is not mentioned. This description is based on drawings provided by the base civil engineer office. Title of the drawing set is "SANATARY SEWER SYSTEM, KIRTLAND AFB, Scale: As Shown, date 21 May 2002, Tab G-02". The areal description is intended to stand-alone but due to the multiple references to streets and buildings, access to the drawings or the AutoCAD file will facilitate in following the general distribution pattern. Specifically excluded from the wastewater system privatization are:

- Oil Water Separators
- Septic tanks and leach fields
- Non –permanent generator sets
- Certain areas in the MFH are not included in this infrastructure project. The wastewater collection systems in the areas called New Pershing, East Sandia Loop, and Capehart East are not included in the wastewater collection system privatization. However, until the MFH privatization contractor can complete the isolation of the wastewater system from the main base system, these areas will temporarily remain the responsibility of this contractor.
- All DOE-owned areas on the base. However, all utilities pass through DOE area's for which right of way documents from DOE will have to be negotiated per area. Some areas are secure and access is not allowed.

Beginning at Manhole R38, northeast of Building 1030, a line flows north along the east side of Corsair Drive to the north side of Randolph Avenue then turns west and flows to Manhole R33, north of Building 1052 and is joined by a line from Air Guard Road, north of the east end of Building 1052. The line continues west to Manhole R32 where a line from the south is connected. This line from the south begins at a lift station to the west of building 1080 and flows through a force main to the northwest and then north to a lift station on the west side of Building 1046. The line then continues north to connect to the main line at Manhole R32. The main line continues west to Manhole R30-2 and is joined by a line from the south that begins on the north side of the fuel storage area and runs north, along the west side of Building 1070 to the connection point. The line then flows west to the west side of the intersection of Fuel Drive where a line from Building 1036 connects from the south. The main line continues to the west on the north side of Randolph Avenue to the east side of the intersection with San Mateo Blvd and is joined by a line from the south. The line from the south begins on the north side of Building 113 and flows north to the south side of Building 125 where it is joined by a line from the west end of Building 111. It then flows northwest and then west, north of Fire Station No. 2 to the east side of San Mateo Blvd before turning north to connect to the Randolph Avenue line. The line then crosses to the south side of Randolph Avenue as it crosses San Mateo Blvd and continues west to a manhole at the northwest corner of Building 1010 and is joined by a line from Manhole R20-2 on the south side of that building. The line then crosses back to the north side of Randolph Avenue where a line from Manhole R19-1 connects from the north. The Randolph Avenue line then flows west to the west side of the Francis Street intersection where it is joined by a line that begins at the southeast corner of Building 926, then flows west to Francis Street before turning south to the connection point. The combined flow continues west to the southeast corner of Building 915 where a line from the north connects. This line begins near the northeast corner of Building 923 and flows west to the northeast corner of Building 922 before turning south to the connection point. The Randolph Street line continues to flow west to a Manhole located southeast of Building 980 and is joined by a line from the north.

This line from the north begins on the north side of Aberdeen Avenue near the west end of Building 585 and flows west to a point a little east of the intersection of Doris Street and turns south, along the east side of the static display to the northwest corner of Building 955 before turning southwest to the east side of Doris Street where it is joined by lines from the northwest and the east. The line from the northwest begins on the southeast side of Building 485 and runs southeast to the connection point. The line from the east begins at the southeast corner of Building 948 and flows west to the east side of Building 949before turning north-northwest to the southeast corner of Building 955 and turning west to the connecting manhole. The combined flow then flows south to connect to the Randolph Avenue line. The Randolph Avenue line then continues west to Manhole R12, southeast of Building 984 and is joined by a line from the south. This line from the south begins at Manhole R12-8 on the north side of Building 1001 and flows west to the northwest corner of that building and turns north, along the west side of Francis Street to Manhole R12-6, northeast of Building 1018. Here the line turns west, between Buildings 1018 and 1019 to Manhole R12-4, northwest of Building 1017, before turning north to the north side of Hercules Way. It then runs west, along the south side of Building 1015, to the service road where it turns northwest and then north to the connection at Manhole R12. The combined flow then continues west, under Parking Apron B, to the intersection of Randolph and Bolling Avenues where a line from the northeast connects.

The line from the northeast begins at Manhole R10-7, at the northeast corner of Building 589 and flows southeast to the northeast corner of the Chapel Parking Area before turning to the south, along the west side of MacDill Street, to Manhole R10-4, on the northwest side of Building 481 where it is joined by a line from the northwest side of Building 482. The combined flow continues to the southwest to the east corner of Building 481 and turns south to the south side of Bolling Avenue. It then follows the south side of Bolling Avenue and connects to the Randolph Avenue line at Manhole R10. The combined flow from Manhole R10 flows southwest to manhole R9, on the south side of Bolling Avenue, north of Building 377, and turns west to Manhole R8 located in the north side of the parking lot to the south of the intersection of Randolph Avenue and Chanute Street where lines connect from the north and south.

The line from the south begins at the intersection of Carlisle Blvd and flows along the southwest side of Bolling Avenue to the intersection of Hamilton Avenue before turning north to connect to Manhole R8. The north line begins R8-4A, at the intersection of Chanute Street and Aberdeen Avenue, and runs south, along the east side of Chanute Street to the north side of Sherman Avenue where a line from the south side of Building 480 joins from the east. The line continues south to Biggs Avenue where it is joined by a line from the east. The line from the east begins at the northeast corner of Building 426 and flows south to the south side of the building before turning to the connection point on the Chanute Avenue line. The combined flow continues south to the intersection of Lowry Avenue where a line that begins on Maxwell Street near the northeast corner of Building connects from the east. The Chanute Avenue line then runs south to the south side of Randolph Avenue where a line that begins south of Building 460 connects from the east. The combined flow from the Chanute Avenue line then runs south and connects at Manhole R8.

The flow from Manhole R8 runs west to Manhole R7, on the west side of Carlisle Blvd and then turns north to Manhole R6 on the south side of Randolph Avenue where lines from both the north and south also connect. The line from the north begins on the south side of Lowry Avenue and flows south, along the west side of Carlisle Blvd to the connection point. The line from the south starts on the east side of Building 336 and flows north, along the west side of Carlisle Blvd to connect at Manhole R6. Connecting to this line from the west is a line that begins on the north side of Building 323. The main line continues west to the intersection of Henderson Street where lines from the north, northwest and south connect.

The line from the northwest begins at the southwest corner of Building 405 and runs south, along the east side of Henderson Street, to the southeast corner of Building 462, and then flows southwest, across Randolph Avenue to the connection point. The line from the south begins at the intersection of Mather Avenue and Henderson Street and flows north to the east side of Building 329 where a line from the north side of Building 336 connects from the east. The combined flow runs north to connect to the Randolph Avenue line. The north line begins on the west side of Project Drive, south of Avenue A, and flows south to Manhole R4-10 and is joined by a line from the east that begins on the west side of Carlisle Blvd. The combined flow continues south to Manhole R4-9 and is joined by a second line from the west side of Carlisle Blvd. The combined flow then continues south to Manhole R4-8, on the south side of Avenue E, and is joined from the west by a line beginning Manhole R4-8D, west of Project Drive on the north side of the Avenue E loop extension to the west. This line follows the outside of the loop to the connection at Manhole R4-8. The Project Drive line then flows south to Manhole R4-7 and is joined by a line from the east that begins between Buildings 3510 and 3511. The

combined flow then runs south, between Buildings 413 and 414, around the east end of Building 416 and along the west side of Henderson Street to the connection point on Randolph Avenue.

The Randolph Avenue line continues east to Kirtland Drive and is joined by a line from the south that begins with lines on the north and west sides of Building 333 that join at the northwest corner of the building and flow west to the intersection of Clark Avenue and Kirtland Drive before running north, along the west side of Kirtland Drive to the connection at Randolph Avenue.

The Randolph Avenue line continues west to Manhole R1, at the Sampling Point, where a line from the north connects. This line begins on the east side of Hickam Blvd, just south of the base fence line. It then flows south to Manhole R1-10, northwest of Building 201, and is joined by a line from the northeast corner of the building. The line then flows to the south side of Scott Avenue and turns west to Manhole R1-8 before flowing south to the intersection of Selfridge Avenue and Hickam Street where a line from the west side of Kirtland Blvd connects. The line then continues south through Manholes R1-6 and R1-5, both having connection lines beginning on the west side of Kirtland Blvd, to Manhole R1-4 on the south side of Letterman Avenue where another line from the west side of Kirtland Blvd connects. The combined flow continues south to Manhole R1-2, east of Building 243, where a line from the south side of Building 244 connects from the east. The line continues to the north side of Lowry Avenue where it is joined by a line from Manhole R1-1A to the east. The line then runs south, west of Building 254, and connects to the mainline at Manhole R1. The combined flow from Manhole R1 runs to the west, across the airfield, to connect to the City of Albuquerque sewer system.

From the southeast corner of Building 590 a line flows north to the south side of the playground, Facility 2547, and is joined by a line from Manhole S5-5 on the north side of Building 592. This line then runs to the west end of the playground and turns north, passing by the west end of Stockton Loop, to Manhole S5 on the south side of Gibson Blvd. The line then turns west, along the south side of Gibson Blvd, to Manhole S3, on the west side of Maxwell Street where a line from the north connects. This line from the north begins near the northwest corner of Building 1911 and runs east to the northeast corner of the building then turns south and flows to Manhole S3-1B where it is joined by a line from Building 1909. The combined flow then runs south-southwest to the west side of the intersection of Maxwell Street and Mercury Circle. It then flows south to the connection at Manhole S3. The combined flow continues west to the southeast side of the intersection of Gibson Blvd and Carlisle Blvd and turns northwest, across Gibson Blvd, and connects to a City of Albuquerque manhole in the middle of Carlisle Blvd.

Beginning at Manhole V7, between Buildings 909 and 910, a line runs west to Manhole V4, east of Truman Street, and turns north to the sampling point at Manhole V3, west of Building 902, and is joined by a line from the north side of Building 942. The combined flow then runs directly north and connects to the City of Albuquerque system on the south side of Gibson Blvd to the west of the Truman Gate.

From a beginning at Manhole A11-31, at the southwest corner of Building 11012, a line flows north to the northwest corner of Building 22010 and is joined by from the east that begins on the east side of 18th Street, southeast of Building 22016, and flows north to a point northeast of Building 22010 before turning west to the connection point. The combined flow then runs

northwest, along the southwest side of Building 22000, to Manhole A11-29, where it turns west, on the south side of Building 2202 to the west side of 15th Street. The line then flows to the south, along the west side of the street, to the north side of East "A" Avenue where it turns to the west to manhole A11-19, at the southwest curve of 12th Loop. It then flows north, to the south side of East Sandia Circle and turns west to Manhole A11-14, near the northwest corner of the Sandia Elementary School. The line then flows south to Manhole A11-9, northeast of the intersection of "D" Avenue and Wyoming Blvd. The line runs west to 4th Street and then turns northwest to the intersection of 3rd Street and "B" Avenue before following the north side of "B" Avenue to the west to Manhole A11-4 where a line from the north side of Building 2014 connects from the south. The combined flow continues west to the east side of Building 20170, then loops around the south side of the building to Manhole A10-A and continues southwest to the parking lot, southeast of Building 20180, and along the south side of the building to Manhole A8, southwest of the building, where it is joined by a line from the north that begins at the northeast corner of the building. The line then flows west and southwest to connect to the City of Albuquerque system on the north side of Gibson Blvd to the west of the San Pablo Street intersection.

Beginning at Manhole B16-7B, at the intersection of "B" Avenue and 4th Street, a line runs west to 3rd Street and then south to the west side of 2nd Street near the northwest corner of Building 20107. It then flows south to the intersection of "D" Avenue and is joined by a line from the east that begins on the north side of Building 20129. The combined flow continues south to Manhole B16-4 in the center of Gibson Blvd and is joined by a line from the east. The line from the east begins at Manhole B16-4C, on the east side of Building 20129, and flows south to the center of Gibson Blvd before turning west to connect at the manhole. The combined flow continues south to Manhole B16-1, on the north side of "F" Avenue, where it is joined by a line that begins between Buildings 20202 and 20203 and flows south to the north side of "F" Avenue before turning west to the connection point.

From Manhole B16-1, the line continues south to the west side of Building 20245 and turns west to the west side of 1st Street and southwest, between Buildings 20224 and 20225, to Manhole B13-A and is joined by a line from the northeast corner of the Sandia Crest Club. The line continues southwest to the Manhole B12, on the south side of "G" Avenue to the west of Texas Street where a major line connects from the east.

The major line from the east begins at Manhole B12-8B, at the intersection of Gibson Blvd and 5th Street, and flows south along the west side of 5th Street to the east side of Building 20206 where a line from DOE connects. The combined flow then runs around the south side of the building to the west side and then continues west to Manhole B12-6 where lines connect from the north. The north line begins on the south side of Building 20203 and flows directly south to the connecting manhole.

The combined flow from Manhole B12-6 continues west, along the south side of "G" Avenue to the east side of 2nd Street where a line from the south connects. The line from the south begins at the west end of Building 20339 and runs directly north and along the east side of 2nd Street to the connection. The "G" Avenue line then continues to the west to Manhole B12-1 on the west side of Texas Street and is joined by a line from the south. This line begins on the north side of "H" Avenue west of 1st Street and flows west to the west side of Texas Street where

it turns north to the connection point. The combined flow then runs a short distance west to connect to the main line at Manhole B12.

From Manhole B12 the line continues west-southwest to Manhole B10, located in the parking lot near the east side of Pennsylvania Street and is joined by a line from the south. The line from the south begins on the west side of Building 20386 and flows north, through a DOE site, to connect at Manhole B10. The main line then runs west, between Buildings 1757 and 1759 and in back of the housing units on the north side of Conner Avenue in the Kia Park Housing Area, and connects to the City of Albuquerque system at the east side of Louisiana Blvd.

Beginning at Manhole A7-4C, at the southwest corner of 1st Street and Gibson Blvd, a line west to Texas Street and then south to the northwest corner of the intersection of Texas Street and "F" Avenue where it is joined by a line from Manhole A7-6, at the intersection of "F" Avenue and 1st Street. The line continues west to Manhole A7-3-2 where a line from the southwest corner of Building 20338 connects from the south. The combined flow continues west to the northeast corner of the intersection of "F" Avenue and Pennsylvania Street where a line from the northwest side of the football field connects. The combined flow then continues to Manhole A7, on the north side of Perimeter Circle, east of Building 1805, and is joined by a line from Manhole A8-1, at the northeast corner of the Wherry Elementary School. From Manhole A7 the line follows Perimeter Circle to the west, and then runs between Buildings 1847 and 1849, to connect to the City of Albuquerque line on Pennsylvania Street.

Beginning at Manhole C26, northwest of Building 20449, a line flows west to Manhole C25, on the west side of 3rd Street, where lines from the north and south connect. The south line begins at the southwest corner of Building 20423 and runs north, along the east side of 3rd Street, then crosses the street to connect. The north line begins at Manhole C25-2, east of Building 20404, and runs west, along the south side of the building, to Manhole C25-1 and turns south to the connection point. The line continues west to the west side of Texas Street, north of Building 20416, where a line from Manhole C21-1, west of Building 20414 connects from the north. The combined flow continues west, to Manhole C20, on the west side of Pennsylvania and is joined by a major line from the north.

The line from the north begins at manhole C20-10A, on the north side of "H" Avenue and east of Wyoming Blvd, and runs south to the north side of Building 20349 before turning west to the southeast corner of Building 20339. It then runs southwest to the east end of "K" Avenue, south of Building 20346, and then follows "K" Avenue to the southwest corner of Building 20386 where it turns to the south to connect at Manhole C20.

From Manhole C20 the line runs a short distance south and then turns west to follow the unimproved road north of the playground to Manhole C10 at the southwest corner of the Zia Park Housing Area. It then runs north to Manhole C6, on the south side of Ridgecrest Drive, and then discharges to the City of Albuquerque system at the southwest corner of the intersection of Louisiana Blvd and Ridgecrest Drive.

Beginning at Manhole C20-11A on the west side of Wyoming Blvd and south of "I" Avenue, a line runs south to Manhole C27, northeast of Building 20450, where lines connect from the south and east. The south line begins on the west side of Wyoming Blvd to the

southeast of Building 20451 and flows directly north to the connection point. The east line begins at Manhole C34, on the east side of Building 20604, and flows south to the southeast of Building 20675 where it turns to the west to Manhole C31, near the southwest corner of Building 20679, where a line from the south connects. The line from the south begins near the southwest corner of Building 20676 and flows west to the northwest corner of Building 20680 where it turns north to connect at Manhole C31. From Manhole C31 the line runs to the south end of the west side of Building 20604 where it is joined by a line from the north end of the west side of the building. The combined flow then runs west to Manhole C29 and is joined by a line from the west side of Building 20687 that runs north, between Buildings 20684 and 20686 to the connection point. The line then continues west to connect to the system at Manhole C27.

From Manhole C27 the line runs a short distance southwest, to the northeast corner of Building 20450, and then turns west to Manhole C27-2, northwest of Building 20420, before turning south to Manhole C27-5 on the south side of Hardin Blvd, where a line from the east, beginning at a manhole northeast of Building 20700 connects. The combined flow continues south to Manhole C27-6, east of the DOE fuel tanks, and turns southwest to Manhole C27-14, on the east side of the Tow Road and near the northeast corner of the sewer lagoons, where a line from the northwest of Building 20560 connects. The combined flow then turns northwest, through the sampling point at Manhole C27-14A, to discharge to the City system north of Pad 4.

A line from the ART Facility, Building 760, runs east through the sampling point northeast of Building 761 and connects to the City system at the northeast edge of Pad 4.

Beginning at Building 37501 at Plant No. 1, a line runs southwest to the west side of the Manzano Fence Road and then follows the road south to Manhole MB17 where a line from Plant No. 3 connects from the northeast. The combined flow continues south to Manhole MB14 and is joined by a line from Plant No. 4. After continuing south to Manhole MB11 where a line from Building 37570 connects, the line continues south to Manhole MB8 and is joined by a line from the southwest corner of Building 37530. The line follows the road to as it turns to the southwest at Manhole MB5 and continues to follow the road through the sampling and metering manhole to Manhole M45 where a line from the southeast connects.

This line from the southeast begins at Manhole MA15, on the east side of Building 30146, and runs around the south side of the building to “B” Street, between Buildings 30142 and 30143, before turning southwest to Manhole MA10, on the east side of Building 30132, where a line from the west side of Building 30143 connects. The line then runs around the south end of the building to Manhole MA8 on the north side of Building 30128, where a line that begins at the northwest corner of Building 30142 and flows northwest to Building 30134, then west and south, to Manhole MA8-1, before connecting to Manhole MA8, joins it. The line then takes an irregular path west to Manhole M4 and is joined by a line from the south corner of Building 30129. The combined flow continues west-southwest to Manhole M2 where a line from the northwest side of Building 30116 connects. The line then flows northwest and discharges at Manhole M45.

From Manhole M45 the line runs southwest to Manhole M41, on the south side of the road on the southeast side of Site 27933 and is joined by a line from Building 48025. The line continues to flow southwest to Manhole M38 on the northeast side of Pennsylvania Street and is joined by a line that runs along the edge of the street from the southeast. This line from the

southeast begins at Manhole MC22 on the north side of Arroyo del Coyote and flows northwest to Manhole MC20 where a line from Building 37504 connects. The line then runs to the east side of Lovelace Road and follows the side of the road north to Manhole MC11, south of the Pennsylvania Street intersection, and is joined from the east by a line from Building 30101. The line continues to the north side of Pennsylvania Street and turns west to follow the alignment of the street to connect to the system at Manhole M38. From Manhole 38, the combined flow runs generally northwest, crossing Power Line Road on the north side of the Prairie Road intersection and then following Prairie Road to Manhole M21 where a line from the south connects. This line begins at with a force main from Facility 27496 that runs northeast to Manhole M21-4, north of Building 20497and then a short distance east before running north to Manhole M21.

From Manhole M21 the line continues northwest to Manhole M15, on the north side of the Munition Haul Road where a DOE line from the south joins it. The combined flow continues along the north side of the Munition Haul Road to Manhole M10, inside the fence for the AFRL 2Km Test Site, and then begins to veer away from the road to the north-northwest and crosses Tijeras Arroyo while turning to the west-northwest. It then crosses the Munition Haul Road just north of the Tijeras Arroyo Bridge and turns north a very short distance to connect to the City of Albuquerque system.

Beginning at Manhole T1, near the northeast corner of Building 733, a line runs east, north of Building 741, to Manhole T4, immediately east of the second fence. It then flows south, parallel to the fence line to Manhole T10, south of the intersection of the fence lines. It then discharges to the City of Albuquerque Sampling Manhole to the southeast.

9. Offeror Questions and Answers have been posted to the DESC website at: www.desc.dla.mil.

10. Changes to Section J39:

Attachment J39, PAST PERFORMANCE QUESTIONNAIRE is hereby **deleted** in its entirety.

And replace with the following:

Attachment J39, PAST PERFORMANCE QUESTIONNAIRE:

ATTACHMENT J39

PAST PERFORMANCE INFORMATION

Provide the information requested in this form for each program being described. Provide frank, concise comments regarding your performance on the contracts you identify.

A. OFFEROR NAME (COMPANY/DIVISION) AND LOCATION (CITY/STATE):

(NOTE: IF THE COMPANY OR DIVISION PERFORMING THIS EFFORT IS DIFFERENT THAN THE OFFEROR, OR THE RELEVANCE OF THIS EFFORT TO THE ACQUISITION IS IMPACTED BY ANY COMPANY/CORPORATE ORGANIZATIONAL CHANGE, NOTE THOSE DIFFERENCES/CHANGES AND EXPLAIN WHY THE PAST PERFORMANCE SHOULD BE ATTRIBUTED TO THE OFFEROR REFER TO THE "ORGANIZATIONAL STRUCTURE CHANGE HISTORY" YOU PROVIDED AS PART OF YOUR RELEVANT PRESENT AND PAST PERFORMANCE VOLUME.)

B. PROGRAM TITLE:

C. CONTRACT SPECIFICS:

1. Contract Number _____

2. Contract Type _____

3. Period of Performance _____

4. Original Contract $ Value _____

5. Current Contract $ Value _____

If Amounts for 4 and 5 above are different, provide a brief description of the reasons for the difference

D. BRIEF DESCRIPTION OF EFFORT AS __PRIME OR __SUBCONTRACTOR.

(Please highlight portions considered most relevant to current acquisition)

E. COMPLETION DATE:

1. Original Contractual Date: _____

2. Current Schedule: _____

3. Estimated Date of Completion: _____

4. How Many Times Changed: _____

5. Primary Causes of Change: _____

F. PRIMARY GOVERNMENT OR EQUIVALENT POINTS OF CONTACT:

(Please provide current information on all individuals)

1. Program Manager: **Name:** _____

Office _____

Address _____

_____

Telephone _____

E-mail _____

Fax _____

2. PCO: **Name:** _____

Office _____

_____

Address _____

_____

Telephone _____

E-mail _____

Fax _____

3. ACO: **Name:** _____

Office _____

Address _____

_____

Telephone _____

E-mail _____

Fax _____

4. COR: **Name:** _____

(Contracting Officer Rep)

Office _____

Address _____

_____

Telephone _____

E-mail _____

Fax _____

G. ADDRESS ANY TECHNICAL (OR OTHER) AREA ABOUT THIS PROGRAM CONSIDERED UNIQUE.

H. SPECIFY BY NAME ANY KEY INDIVIDUAL(S) WHO PARTICIPATED IN THIS PROGRAM AND IS/ARE PROPOSED TO SUPPORT THE INSTANT ACQUISITION. ALSO, INDICATE THEIR CONTRACTUAL ROLES FOR BOTH ACQUISITIONS.

I. ADDRESS PROBLEMS ENCOUNTERED ON THIS CONTRACT AND YOUR SOLUTIONS TO THOSE PROBLEMS.

J. IDENTIFY IF A SMALL BUSINESS OR DISADVANTAGED BUSINESS PLAN OR GOAL WAS REQUIRED. IF SO, IDENTIFY IN TERMS OF A PERCENTAGE OF THE PLANNED VERSUS ACHIEVED GOAL DURING THE CONTRACT. IF GOALS WERE NOT MET. PLEASE EXPLAIN.

K. DESCRIBE/DISCUSS THE RELEVANCY OF THE SERVICES YOU PROVIDED ON YOUR REFERENCED CONTRACT TO THESE QUESTIONS AS THEY MAY PERTAIN TO THE SPECIFIC UTILITY.

General

1. Indicate (yes or no) if you owned, operated, maintained the system for the referenced customer. Indicate if the systems were located on the customer's site.

	OWN	OPERATE	MAINTAIN	ON SITE
Sewer Lines				
Pump Stations				
WTP				
IWTP				
Electrical Distribution System				
Water Lines				
Gas Distribution System				

Wastewater System

1. What is the average daily flow (gallons per day) processed for the referenced customer?

2. What is the dollar value of the capitol improvements made to the portion of the system used to provide service to the referenced customer for the total period of time service has been rendered?

Time _____ (yrs) $_____

3. On an annual basis what percent of the average daily flow is due to Inflow/Outflow for the reference customer? _____ (%)

4. Have capital improvements been completed that directly or indirectly reduced the amount of Inflow/Infiltration for the system serving the referenced customer?

Capital Improvements _____ ($) % reduction in Inflow/Infiltration _____(%)

Water System

1. Quantity of w/ww service provided to the customer?

2. Who owns the treatment plant, distribution/collection system?

Electrical System

1. How much power or energy do you provide the customer? Please answer in term of kilowatts, megawatts or kW hours, Mw hours. Are there demand charges? How many buildings are served?

2. Do you own, operate and maintain the substations, transformers, switchgear and distribution system? If not please describe; i.e. own but subcontract operation and maintenance; do not own but manage operation and maintenance; operate the overhead distribution system but not the substations, transformers, and switchgear etc.

3. How much of the distribution system do you own/operate? (Approximate length.) Do you serve other customers?

B. All other Terms and Conditions shall remain unchanged and in full force and effect.